



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Boudouris et al
Application No.:	09/990109
Filed:	November 21, 2001
For:	Magnetic Substrates, Composition and Method for Making the Same
Group Art Unit:	1733

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Docket No.: M112.2-10064-US01

DECLARATION UNDER 37 C.F.R. §1.132

I, Randall Boudouris, coinventor of the above referenced patent application and of the subject matter described and claimed therein, attest and say as follows:

1. I, Randall A. Boudouris, founded and have been president of MagnetNotes, Ltd. since 1998. MagnetNotes, Ltd. was incorporated in 2000. Prior to founding MagnetNotes, Ltd., I had been involved in the printing industry since 1988.
2. I am co-inventor of the subject matter disclosed and claimed in U.S. Patent Application Serial No. 09/990,109.
3. Based on my experience in both the area of magnets and in the area of printing, I am qualified as one of skill in the art.
4. I provide this Declaration in support of the patentability of the subject matter disclosed and claimed in the patent application which is referenced above.
5. Exhibit A is a letter provided by Dr. B. Thomas Shirk, founder and President of Hoosier Magnetics, the largest producer of ferrite powders in the western hemisphere.

5a. Dr. Shirk has been involved with ferrite magnets since 1963 when he initiated a doctorate study in that area, and is considered one of skill in the art.

5b. The statements given by Dr. Shirk correlate with the subject matter of one or more claims of U.S. Patent Application Serial No. 09/990,109.

5c. Under reference numeral 1) of Dr. Shirk's letter, he states that providing direct application of a ferrite/thermoplastic polymer mixture onto a paper substrate as found in claim 1 of U.S. Patent Application Serial No. 09/990,109, removes the necessity of first manufacturing a magnet, and then adhering the magnet to a substrate as found in the paragraph above reference numeral 1). This is a technological advance in the art as also stated in the last paragraph of Dr. Shirk's letter.

5d. The statement following reference numeral 1) of Dr. Shirk's letter has a direct nexus to claim 1 of U.S. Patent Application Serial No. 09/990,109.

5e. The statement following reference numeral 2) of Dr. Shirk's letter relates to claims 22-24 of U.S. Patent Application Serial No. 09/990,109.

5f. The statement following reference numeral 3) of Dr. Shirk's letter relates to new claims 79 and 80 of U.S. Patent Application Serial No. 09/990,109.

5g. The statement following reference numerals 5) and 6) of Dr. Shirk's letter relates claim 8 of U.S. Patent Application Serial No. 09/990,109.

5h. These statements provide objective indicia of the commercial success and failure of others to provide a process for directly applying magnetic compositions to printable substrates as found in claim 1 of U.S. Patent Application Serial No. 09/990,109, and to features found in several of the claims dependent from claim 1 thereof.

6. Exhibit B is a letter written by Scott E. Morling, Director of Magnetic Papers at MeadWestvaco.

6a. MeadWestvaco Corporation is a highly respected global company with four principal operating business segments including packaging, paper, consumer and office products and specialty chemicals with annual sales of approximately 7½ billion dollars.

6b. After conducting their own prior art search and reviewing U.S. Patent Application Serial No. 09/990,109, MeadWestvaco licensed the technology disclosed and

claimed in pending U.S. Patent Application Serial No. 09/990,109 for a large sum of money as an initial payment for licensing the technology and substantial royalties on the gross sales of the products produced accordingly.

6c. MeadWestvaco has sold approximately 1 million dollars of products produced according to the subject matter disclosed and claimed in U.S. Patent Application Serial No. 09/990,109 between January of 2004 until May, 2004, has received other significant sales orders to date, and expects considerable future sales increases, and is investing large sums of money in the advertising and promotion of said products.

6d. Scott Morling believes the processes and magnetic assemblies described and claimed in U.S. Patent Application Serial No. 09/990,109, to offer significant advances over prior technology giving MeadWestvaco competitive advantages in traditional markets, as well as in markets where magnetic assemblies were not otherwise considered feasible due to economics or processability.

6e. According to Scott Morling, one significant benefit of the process described and claimed in U.S. Patent Application Serial No. 09/990,109, is that it allows magnets to be processes like paper which is a printable substrate as found in claim 1 of the present invention.

7. Exhibit C is a letter from Jerry Majkrzak P.E., President of May Coating Technologies, Division of Acumeter Laboratories Inc., St. Paul, MN.

7a. Jerry Majkrzak has been involved with coating of web-based products since 1974 when he became a Project Engineer for 3M Company. From 1980 to 1983, Jerry Majkrzak became the plant engineering manager for Kroy, Inc. In 1983, Jerry and his partner founded May Coating Technologies.

7b. May Coating Technologies designs and manufactures standard and custom equipment for melting and applying hot melts and 100% solids including complete coating lines or coating modules utilizing slot die, rotary screen, gravure, roll and various other coating methods as well as a complete line of hot melt processors for melting and metered dispensing of material from drums, pails or cans, and hot melts in chicklet,

block, pillow, or super sack forms. May Coating Technologies also has facilities and personnel for assisting clients in process development and scale-up to production.

7c. May Coating Technologies is a highly respected name in hot melt processing and coating equipment.

7d. Based on his vast experience with coating equipment and coating processes, Jerry Majkrzak is qualified as one of skill in the art.

7e. Jerry Majkrzak believes the process to be unique and novel over prior art processes.

All statements made herein of my own knowledge are true; all statements made on the information and belief are believed to be true; and all the foregoing statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application and any registration resulting therefrom.

Date:

5.28.04

Signed:

Randall B. [Signature]



Exhibit A

HOOSIER MAGNETICS, INC.

2001 Cosby Road
Washington, IN 47501

Telephone 812-254-6846
FAX 812-254-1389

To whom it may concern:

I have been directly involved with ferrite magnets since 1963 when I initiated a Ph.D. study in ferrites. In 1975, I founded Hoosier Magnetics, a manufacturing company that produces ferrite powders. Today Hoosier is the largest producer of ferrite powders in the Western hemisphere and one of the largest in the world.

Bonded ferrite magnets are made by first mixing plastic or rubber ingredients with the ferrite powder. Next the ferrite magnet is produced through manufacturing processes of extrusion, injection molding or calendaring. In every case a discrete, individual magnet must be produced.

In the present art, calendered sheets are produced by a slow (30ft/min) process. The thickness of calendered sheets is not less than 0.010 inches because of manufacturing constraints. Next, in a separate process, paper is glued to the magnetic calendered sheet, also a slow manufacturing process. Finally, the coated sheet is ready for printing, but only by screen printing, because the thickness of the sheet will not allow offset printing.

The MagnetNotes patent is a significant breakthrough. It is not an obvious extension of the present art for several reasons:

1. MagnetNotes technology provides for the direct coating of ferrite/poly mixture onto the paper substrate. It is not necessary to first manufacture a discrete magnet.
2. Ferrite coating thicknesses can be as low as 0.002", such thicknesses are impossible with the present art.
3. Coating speeds of 200ft/min and higher are impossible with the present art, but are currently demonstrated with the MagnetNotes technology.
4. Printing onto the coated paper can be made using high speed offset printing techniques. This is because the magnet is thin enough to pass through the offset printing machines.
5. Coating and Printing can be accomplished in a single continuous operation.
6. The combination of the factors above provides for an extremely low cost product compared to the present art.

For these and other reasons, the MagnetNotes technology is a significant step forward. It is not obvious, it involves new processes and technologies. At Hoosier Magnetics we are customizing our powder for the MagnetNotes application and we are expanding our capacity in order to keep up with the predicted demand. It is likely that MagnetNotes development will displace the prior process and will expand the market.

Sincerely Yours,

Dr. B. Thomas Shirk
President

24 March 2004



MeadWestvaco
Magnetic Papers Group
Courthouse Plaza NE
Dayton, OH 45463

MeadWestvaco

May 20, 2004

Dear Sir or Madam:

MeadWestvaco learned about Randy Boudouris' magnet paper technology in June of 2002 when he approached us with an opportunity to partner with him to take products based on his technology to market. During the following six months we did extensive market, technical and patent due diligence to determine what type of benefit products based on his patent applications could have for our business. During our search we learned that the products and processes he has created are far different than any previously established method of creating printable magnetic media. His processes are faster and more productive and products made on it are thinner and lighter. Our research culminated in our signing an exclusive agreement to produce and market products based on his inventions in North and South America. We are confident enough in the technology that we have invested a large amount of money to support both Randy's company and the subsequent commercialization of our new product, MagneCote, which is made using technology he has invented.

The outcome of our analysis showed us that Randy's inventions would allow us to produce and sell printable magnetic media that is thinner than any magnetic products made with prior technology. The features of products made with Randy's new technology result in magnetic media that can be processed just like paper. It can be printed on traditional printing equipment and it can be converted on traditional paper converting equipment, processes that traditional flexible magnets only run on with difficulty. Our new product's unique features also will allow us to market magnets for applications where magnets were not considered previously due to cost, weight or processability.

MeadWestvaco would not have invested in Randy and his technology if we did not believe that it would give us a unique and sustainable advantage in a new and expanding market. His technologies are the foundation of that uniqueness and we anticipate that the ensuing patents will provide us with the sustainability that we anticipate.

Sincerely,

Scott E. Morling
Director – Magnetic Papers



2976 Cleveland Ave. North, St Paul, MN 55113
Phone: (651) 765-9686
Fax: (651) 765-9687

April 1, 2004

MagnetNotes Ltd.
7862 West Central Ave.
Toledo, OH 43617

To whom it May concern:

My name is Jerry Majkrzak and I am the president of May Coating Technologies Div. of Acumeter. I have been working in the coating of web-based products since 1974. At first I was a Project Engineer at 3M Company for 6 years. I was the plant engineering manager at Kroy Inc. for 3 years. I have been working at, and am one of the two original founding partners of May Coating Technologies which was founded in 1983. I hold a number of patents.

I have seen many coating processes in the 30 years I have worked at 3M, Kroy, and May Coating Technologies. I am familiar with the solvent coating of magnetic media to make commercial products such as audio and video cassette recording tapes.

The inventors developed the coating process and compositions related to the process in a May Coating Technologies laboratory. I believe it is a unique process of manufacturing magnetic assemblies by using a hot melt material to carry the iron particles and immediately magnetizing the ferrite particles. The process allows for making thin, low cost magnets that can be commercially printed. I believe the technology has wide utility commercially, especially in markets where cost is a factor, such as refrigerator door magnets. It took a significant amount of research and development, particularly equipment modifications, lab trials and formulation modifications, in order to establish commercially viable production speeds. I believe the process to be novel in the industry, and it provides significant advantages over processes which are currently employed.

Sincerely,

Jerry Majkrzak P.E.
President of May Coating Technologies